Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (original) A wound healing composition comprising living cells within a support matrix, in which the cells have a wound healing phenotype, and in which the composition is single-layered and has been incubated for up to about 8 days to allow development of the wound healing phenotype.

2. (previously presented) The wound healing composition of claim 1, in which the composition is incubated for up to about 96 hours.

3. (previously presented) The wound healing composition of claim 1, in which the composition is incubated at a temperature of about 37°C.

4. (previously presented) The wound healing composition of claim 1, in which the composition is stored after incubation for up to about 40 days at a temperature of 2°C to 8°C while retaining the wound healing phenotype.

5. (previously presented) The wound healing composition of claim 1, in which the cells are mammalian.

6. (previously presented) The wound healing composition of claim 1, in which the cells are substantially fibroblasts.

7. (previously presented) The wound healing composition of claim 6, in which the fibroblasts are dermal fibroblasts.

8. (previously presented) The wound healing composition of claim 1, in which the composition substantially excludes keratinocytes.

9. (previously presented) The wound healing composition of claim 1, in which the cells are actively synthetic or able to become actively synthetic rapidly.

10. (previously presented) The wound healing composition of claim 1, in which the cells are not proliferating or not senescent.

11. (previously presented) The wound healing composition of claim 1, in which the cells are suspended within the matrix.

12. (previously presented) The wound healing composition of claim 1, in which the matrix is protein-based.

13. (previously presented) The wound healing composition of claim 1, in which the matrix is a fibrin matrix.

14. (previously presented) The wound healing composition of claim 13, in which the fibrin has a concentration in the range of 3 to 12 $mg.ml^{-1}$.

15. (previously presented) The wound healing composition of claim 13, in which the fibrin matrix is formed by thrombin-mediated polymerisation of fibrinogen.

16. (previously presented) The wound healing composition of claim 1, in which the matrix is non-pyrogenic or sterile.

17. (previously presented) The wound healing composition of claim 1, further comprising a protease inhibitor.

18. (previously presented) The wound healing composition of claim 1, in which the composition is incubated in a protein-rich environment.

19. (previously presented) The wound healing composition of claim 1, in which the composition has a thickness of approximately 8 mm or less.

20. (previously presented) The wound healing composition of claim 1, comprising about 450 to 2500 cells per mm^2.

21. (previously presented) The wound healing composition of claim 1, in which the cells are human dermal fibroblasts within a sterile, non-pyrogenic support matrix formed by

thrombin-mediated polymerisation of fibrinogen, and in which the composition has been incubated for 16 to 24 hours at about 37°C.

22. (previously presented) The wound healing composition of claim 1, in which the matrix is solid or semi-solid.

23. (previously presented) The wound healing composition of claim 1, in which the composition is packaged in a container suitable for transporting the composition, storing the composition, or topically applying the composition to a skin surface.

24. (previously presented) The wound healing composition of claim 23, in which the container comprises a flexible pouch consisting of two sheets of impermeable flexible material peripherally sealed to provide a means of containment for the composition, the pouch comprising a first internal surface to which the composition is adherent at a level of adhesion more than between the composition and a second internal surface of the pouch but less than that between the composition and the skin surface, such that in use the pouch may be opened by parting the sheets and the composition conveniently manipulated and directly applied to the skin surface without further requirement for the composition to be touched directly by any other means prior to application.

25. (previously presented) The wound healing composition of claim 23, in which the container is an Oliver™ Products Company "Solvent Resistant Peelable Pouching Material" (Product number Q15/48BF1).

26. (previously presented) The wound healing composition of claim 1, for use as a medicament.

27. (previously presented) The wound healing composition of claim 1, for use as a medicament in the treatment of a skin lesion.

28. (previously presented) The wound healing composition of claim 26, wherein said medicament is used for topical application to a skin lesion.

Claims 29-36 (cancelled)

37. (previously presented) The wound healing composition of claim 2, in which the composition is incubated for up to about 72 hours, 48 hours, 25 hours, or 24 hours.

38. (previously presented) The wound healing composition of claim 2, in which the composition is incubated for between about 16 to about 24 hours.

39. (previously presented) The wound healing composition of claim 4, in which the composition is stored after incubation for up to about 19 days.

40. (previously presented) The wound healing composition of claim 39, in which the composition is stored after incubation for about 7 to 14 days or about 7 to 11 days.

41. (previously presented) The wound healing composition of claim 4, in which the composition is stored after incubation at a temperature of 3°C to 5°C.

42. (previously presented) The wound healing composition of claim 41, in which the composition is stored after incubation at a temperature of about 4°C.

43. (previously presented) The wound healing composition of claim 5, in which the cells are human.

44. (previously presented) The wound healing composition of claim 6, in which fibroblasts comprise between about 90% to 100% of the cells of said composition.

45. (previously presented) The wound healing composition of claim 7, in which the fibroblasts are human dermal fibroblasts.

46. (previously presented) The wound healing composition of claim 11, in which the cells are suspended substantially uniformly within the matrix.

47. (previously presented) The wound healing composition of claim 12, in which the matrix has a protein concentration in the range of about 3 to 12 $mg.ml^{-1}$.

48. (previously presented) The wound healing composition of claim 14, in which the fibrin has a concentration in the range of 3 to 5 $mg.ml^{-1}$ or 7 to 12 $mg.ml^{-1}$.

49. (previously presented) The wound healing composition of claim 17, wherein said protease inhibitor is aprotinin or tranexamic acid.

50. (previously presented) The wound healing composition of claim 19, in which the composition has a thickness of approximately 5 mm or less.

51. (previously presented) The wound healing composition of claim 28, wherein said skin lesion is a venous ulcer, diabetic ulcer, pressure sore, burn or iatrogenic grating wound.

52. (withdrawn) A method of manufacturing the wound healing composition of claim 1, comprising the steps of: suspending living cells in a solution comprising a polymerisation agent or a monomer capable of being polymerised by the polymerisation agent into a matrix; forming a single-layered support matrix comprising the cells by polymerisation of the monomer with the polymerisation agent; and incubating the matrix under conditions which allow development of a wound healing phenotype in the cells, thereby forming the wound healing composition.

53. (withdrawn) The method of claim 52, in which the matrix is formed by adding monomer or polymerisation agent to the solution such that both monomer and polymerisation agent are present in sufficient concentrations to effect polymerisation.

54. (withdrawn) The method of claim 52, in which the monomer is fibrinogen and the polymerisation agent is thrombin.

55. (withdrawn) The method of claim 52, in which polymerisation occurs in a mold.

56. (withdrawn) The method of claim 52, comprising the further step of packaging the wound healing composition into a container for storing the composition or for transporting the composition or for topically applying the composition to a skin surface of a patient.

57. (withdrawn) A method of manufacturing the wound healing composition of claim 1, comprising the steps of forming a single-layered support matrix by polymerising a polymerisable monomer with a polymerisation agent, casting living cells into the support

matrix, and incubating the matrix under conditions which allow development of a wound healing phenotype in the cells, thereby forming the wound healing phenotype.

58. (withdrawn) The method of claim 57, in which the monomer is fibrinogen and the polymerisation agent is thrombin.

59. (withdrawn) The method of claim 57, in which polymerisation occurs in a mold.

60. (withdrawn) The method of claim 57, comprising the further step of packaging the wound healing composition into a container for storing the composition, transporting the composition, or topically applying the composition to a skin surface of a patient.

61. (withdrawn) Use of living cells as defined in claim 1 in the manufacture of a wound healing composition for the treatment of a skin lesion.

62. (withdrawn) A method of treating a patient suffering from a skin lesion comprising topically applying of the wound healing composition of claim 1 to the skin lesion.